IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF PENNSYLVANIA

IN RE: DIET DRUGS (PHENTERMINE/ FENFLURAMINE/DEXFENFLURAMINE) PRODUCTS LIABILITY LITIGATION)) MDL NO. 1203))
THIS DOCUMENT RELATES TO:)
SHEILA BROWN, et al.)) CIVIL ACTION NO. 99-20593
v.)
AMERICAN HOME PRODUCTS CORPORATION)) 2:16 MD 1203)

MEMORANDUM IN SUPPORT OF SEPARATE PRETRIAL ORDER NO. 8609

Bartle, C.J. February 15, 2011

The Estate of Lanell Botts, a representative claimant under the Diet Drug Nationwide Class Action Settlement Agreement ("Settlement Agreement") with Wyeth, seeks benefits from the AHP Settlement Trust ("Trust"). Based on the record developed in the show cause process, we must determine whether the Estate has demonstrated a reasonable medical basis to support its claim for Matrix Compensation Benefits ("Matrix Benefits").

^{1.} Prior to March 11, 2002, Wyeth was known as American Home Products Corporation.

^{2.} Thomas H. Botts, the spouse of Lanell Botts, also has submitted a derivative claim for benefits.

^{3.} Matrix Benefits are paid according to two benefit matrices (Matrix "A" and Matrix "B"), which generally classify Diet Drug Recipients for compensation purposes based upon the severity of their medical conditions, their ages when they are diagnosed, and the presence of other medical conditions that also may have (continued...)

To seek Matrix Benefits, a representative claimant must first submit a completed Green Form to the Trust. The Green Form consists of three parts. The representative claimant completes Part I of the Green Form. Part II is completed by an attesting physician, who must answer a series of questions concerning the deceased's medical conditions that correlate to the Matrix criteria set forth in the Settlement Agreement. Finally, if the representative claimant is represented by an attorney, the attorney must complete Part III.

In August, 2007, Thomas Botts, Representative of the Estate, submitted a completed Green Form to the Trust signed by the attesting physician, Manoj R. Muttreja, M.D. Based on an echocardiogram dated January 13, 2002, Dr. Muttreja attested in Part II of the Green Form that Ms. Botts suffered from moderate mitral regurgitation, a reduced ejection fraction in the range of

^{3. (...}continued) caused or contributed to the Diet Drug Recipient's valvular heart disease ("VHD"). See Settlement Agreement §§ IV.B.2.b. & IV.B.2.d.(1)-(2). Matrix A-1 describes the compensation available to representative claimants where the Diet Drug Recipients are diagnosed with serious VHD, they took the drugs for 61 days or longer, and they did not have any of the alternative causes of VHD that made the B Matrices applicable. In contrast, Matrix B-1 outlines the compensation available to representative claimants where the Diet Drug Recipients were registered as having only mild mitral regurgitation by the close of the Screening Period, they took the drugs for 60 days or less, or they were diagnosed with conditions that would make it difficult for them to prove that their VHD was caused solely by the use of these Diet Drugs.

^{4.} Under the Settlement Agreement, representative claimants include estates, administrators or other legal representatives, heirs or beneficiaries. <u>See</u> Settlement Agreement § II.B.

50% to 60%, and ventricular fibrillation or sustained ventricular tachycardia which results in hemodynamic compromise. Based on such findings, the Estate would be entitled to Matrix B-1, Level V benefits in the amount of \$233,573.

In the report of the echocardiogram, the reviewing cardiologist, George G. Miller, M.D., F.A.C.C., measured the mitral regurgitation of Ms. Botts to be 56%. Under the definition set forth in the Settlement Agreement, moderate or greater mitral regurgitation is present where the Regurgitant Jet Area ("RJA") in any apical view is equal to or greater than 20%

^{5.} Dr. Muttreja also attested that Ms. Botts suffered from mild aortic regurgitation. This condition, however, is not at issue in this claim.

^{6.} The Trust determined, and claimant did not dispute, that Ms. Botts ingested Diet Drugs for less than 61 days. Thus, if the Estate is entitled to Matrix Benefits, they must be paid on Matrix B-1. See Settlement Agreement § IV.B.2.d.(2)(b).

Under the Settlement Agreement, a claimant or representative claimant is entitled to Level V benefits if the Diet Drug Recipient qualifies for Level II benefits and suffers from ventricular fibrillation or sustained ventricular tachycardia which results in hemodynamic compromise. See Settlement Agreement § IV.B.2.c.(5)(d). A claimant or representative claimant is entitled to Level II benefits for damage to the mitral valve if the Diet Drug Recipient is diagnosed with moderate or severe mitral regurgitation and one of five complicating factors delineated in the Settlement Agreement. See id. § IV.B.2.c.(2)(b). As the Trust does not contest the attesting physician's findings that Ms. Botts suffered from ventricular fibrillation or sustained ventricular tachycardia which results in hemodynamic compromise and a reduced ejection fraction, which is one of the complicating factors needed to qualify for a Level II claim, the only issue is the level of decedent's mitral regurgitation.

of the Left Atrial Area ("LAA"). <u>See</u> Settlement Agreement § I.22.

In January, 2008, the Trust forwarded the claim for review by M. Michele Penkala, M.D., one of its auditing cardiologists. In audit, Dr. Penkala concluded that there was no reasonable medical basis for the attesting physician's finding of moderate mitral regurgitation because the echocardiogram demonstrated only mild mitral regurgitation. Dr. Penkala explained:

To me the majority of the putative [mitral regurgitant] flow is true backflow occurring in the very early part of systole during the "blue/red" period. There is minimal-mild [mitral regurgitant] flow seen during late systole.

Based on the auditing cardiologist's finding that

Ms. Botts had mild mitral regurgitation, the Trust issued a postaudit determination denying the Estate's claim. Pursuant to the
Rules for the Audit of Matrix Compensation Claims ("Audit
Rules"), the Estate contested this adverse determination. In
contest, the Estate argued that the auditing cardiologist

"grievously erred" in determining that there was no reasonable
medical basis for Dr. Muttreja's finding of moderate mitral
regurgitation.

^{8.} Claims placed into audit on or before December 1, 2002 are governed by the Policies and Procedures for Audit and Disposition of Matrix Compensation Claims in Audit, as approved in PTO No. 2457 (May 31, 2002). Claims placed into audit after December 1, 2002 are governed by the Audit Rules, as approved in PTO No. 2807 (Mar. 26, 2003). There is no dispute that the Audit Rules contained in PTO No. 2807 apply to the Estate's claim.

In support, the Estate submitted an additional report of the August 13, 2002 echocardiogram completed by Mark

Berger, M.D. Dr. Berger stated that decedent's RJA/LAA ratio was 50%. The Estate also submitted signed declarations of Dr. Muttreja and three medical experts, Leon J. Frazin, M.D., F.A.C.C., Michael E. Staab, M.D., F.A.C.C., and Paul W. Dlabal, M.D., F.A.C.P., F.A.C.C., F.A.H.A. In his declaration, Dr. Muttreja stated, in pertinent part, that:

- 4. I traced the Regurgitant Jet Areas (RJAs), and I found significant jets other than the ones that were originally traced on the study.
- 5. I calculated an RJA/LAA ratio of 32% on the maximum jet that I traced (RJA/LAA = 5.02/15.68).

* * *

- 9. The end of the QRS complex would be early systole and therefore possibly consistent with "back flow." However, Exhibits B, C, and D show that the jets were clearly distant from the end of the QRS complex. Therefore, these jets clearly did not represent "back flow."
- 10. Further, the jets were mosaic in color, which is a sign of high velocity flow, or "aliasing." The jets did not occur during the "blue/red" period, which is characteristic of "back flow."

The medical experts reviewed the echocardiogram and also opined that there was a reasonable medical basis for Dr. Muttreja's finding. Dr. Frazin "found moderate mitral regurgitation, with an RJA/LAA ratio of 27%." Dr. Staab also found that "the regurgitant jet to left atrial area far exceeds

the 20% threshold to categorize the mitral valve regurgitation as moderate in severity." He noted, "The identified jets were representative of the degree of mitral regurgitation, were not isolated, and were not a low-velocity backflow. The jets were high velocity and represented as a mosaic of color on the screen." Dr. Dlabal "found moderate to severe mitral regurgitation, with an RJA/LAA ratio which was greater than 50%." Finally, the Estate submitted the "Report on Initial Review" completed by the Seventh Amendment participating physician, who determined that Ms. Botts had severe mitral regurgitation with an RJA/LAA ratio of 44.42%.

Although not required to do so, the Trust forwarded the claim for a second review by the auditing cardiologist.

Dr. Penkala submitted a declaration in which she again concluded that there was no reasonable medical basis for Dr. Muttreja's finding of moderate mitral regurgitation. Specifically,

Dr. Penkala stated:

- 8. In accordance with the Trust's request, I again reviewed the entirety of Claimant's January 13, 2002 echocardiogram tape, as well as Claimant's Contest Materials.
- 9. Based on my review, I again confirm my finding at audit that there is no reasonable medical basis for the Attesting Physician's finding that Claimant has moderate mitral regurgitation.

* * *

12. There is significant "overgaining" of the 2D imaging with a prominent speckling pattern applied to the LV cavity itself and the myocardium. In addition, there[] appears to be excessive color Gain with color flow assigned to the tissue outside the blood pool and a "serrated" appearance to the color. All of these effects are in keeping with excess color Gain.

13. I reviewed the still frame color images submitted with Claimant's Contest; these frames do not demonstrate moderate mitral regurgitation. The traced "regurgitation" on these frames demonstrates a red-blue flow pattern which it [sic] typical of backflow. Most of the "mosaic flow" identified by Dr. Muttreja in his declaration occurs just after the QRS, and just before or on the beginning of the T wave; almost <u>all</u> of it is seen during a "red-blue" period, typical of backflow. Any true mitral regurgitation demonstrated here is, at most, mild.

The Trust then issued a final post-audit determination, again denying the claim. The Estate disputed this final determination and requested that the claim proceed to the show cause process established in the Settlement Agreement. See Settlement Agreement § VI.E.7; PTO No. 2807; Audit Rule 18(c). The Trust then applied to the court for issuance of an Order to show cause why the Estate's claim should be paid. On August 21, 2008, we issued an Order to show cause and referred the matter to the Special Master for further proceedings. See PTO No. 7925 (Aug. 21, 2008).

Once the matter was referred to the Special Master, the Trust submitted its statement of the case and supporting documentation. The Estate then served a response upon the Special Master. The Trust submitted a reply on November 25, 2008, and the Estate submitted a sur-reply on December 15, 2008. Under the Audit Rules, it is within the

Special Master's discretion to appoint a Technical Advisor⁹ to review claims after the Trust and the Estate have had the opportunity to develop the Show Cause Record. <u>See</u> Audit Rule 30. The Special Master assigned a Technical Advisor, Sandra V. Abramson, M.D., F.A.C.C., to review the documents submitted by the Trust and the Estate and to prepare a report for the court. The Show Cause Record and Technical Advisor Report are now before the court for final determination. <u>See id.</u> Rule 35.

The issue presented for resolution of this claim is whether the Estate has met its burden in proving that there is a reasonable medical basis for the attesting physician's finding that the late Lanell Botts had moderate mitral regurgitation.

See id. Rule 24. Ultimately, if we determine that there is no reasonable medical basis for the answer in the Green Form that is at issue, we must affirm the Trust's final determination and may grant such other relief as deemed appropriate. See id. Rule 38(a). If, on the other hand, we determine that there is a reasonable medical basis for the answer, we must enter an Order directing the Trust to pay the claim in accordance with the Settlement Agreement. See id. Rule 38(b).

^{9.} A "[Technical] [A]dvisor's role is to act as a sounding board for the judge-helping the jurist to educate himself in the jargon and theory disclosed by the testimony and to think through the critical technical problems." Reilly v. United States, 863 F.2d 149, 158 (1st Cir. 1988). In a case such as this, where there are conflicting expert opinions, a court may seek the assistance of the Technical Advisor to reconcile such opinions. The use of a Technical Advisor to "reconcil[e] the testimony of at least two outstanding experts who take opposite positions" is proper. Id.

In support of its claim, the Estate reasserts the arguments made in contest. In addition, the Estate submits the argument that Dr. Penkala's findings were inconsistent and "confusing." According to the Estate, although Dr. Penkala "saw some mosaic flow during what she believed was a 'red-blue' period," mosaic flow is indicative of "high velocity flow, or 'aliasing.'" The Estate disputed Dr. Penkala's finding of "overgaining" and "excessive color Gain" and noted that she did not report it in her first audit. Finally, the Estate submitted a second declaration of Dr. Muttreja, who stated:

- 4. First of all, Dr. Penkala is incorrect in her assertion that overgain is consistent with excess color gain. Overgain and color gain are clearly different.
- 5. Contrary to Dr. Penkala's assertion, color gain is not used to create a signal. Rather, color gain is necessary in order to increase the strength of the signals which are displayed on the echocardiogram.
- 6. In contrast to color gain, overgain means an increased gray scale gain. Since high gray scale gain can hide the color display, the gray scale gain should be decreased when displaying color.
- 7. The difference between color gain and overgain is accurately set forth in M. Allen, et al., Echocardiography 84 (2d ed. 1998), which states, "The color increases the strength of the signals displayed. The grey scale gains should be decreased when displaying color since most systems give priority to the grey scale. High grey scale gain and depth gain compensation can mask the color display."
- 8. In Dr. Penkala's Declaration, it is unclear whether she attributes the "prominent speckling pattern" to overgain or to

excessive color gain. The increased speckling pattern can signify increased gray scale gain, also known as overgain. However, if the gray scale gain was overly increased in this case, then the color display would be masked, as set forth above.

- 9. On the other hand, if Dr. Penkala attributes the "prominent speckling pattern" to excessive color gain, then she is describing a proper echocardiographic procedure set forth in H. Feigenbaum, Echocardiography 39 (6th ed. 2004), which states "To optimize the settings, color gain should be increased until color pixels (speckling) appear within the tissue, then the gain should be reduced slightly." In other words, Dr. Penkala is simply describing a process performed in order to optimize the color Doppler flow.
- 10. In addition to the other erroneous statements found in the Declaration, Dr. Penkala stated that "The traced 'regurgitation' on these frames demonstrates a red-blue flow pattern which is typical of backflow. Most of the 'mosaic flow' identified by Dr. Muttreja in his declaration occurs just after the QRS, and just before or on the beginning of the T wave."
- 11. First, Dr. Penkala erred by stating that the traced jets on the frames demonstrate a red-blue flow pattern. Rather, the traced jets clearly demonstrate a mosaic pattern.
- 12. Moreover, Dr. Penkala erred when she associated backflow with jets which occurred after the QRS complex, and just before or on the beginning of the T wave. As I stated in a Declaration dated May 13, 2008, back flow occurs on or immediately after the QRS complex. However, if a jet occurs "after the QRS, and just before or on the beginning of the T wave," then that is the point of the cardiac cycle where mitral regurgitation does occur. The T wave occurs when the cardiac myocytes regenerate after contracting. Therefore, the T wave occurs only during end systole and diastole.

In response, the Trust argues that the Estate has failed to provide a reasonable medical basis for the attesting physician's finding of moderate mitral regurgitation.

Specifically, the Trust contends that "the 'jets' of mitral regurgitation relied upon by Dr. Muttreja in arriving at his assessment of moderate regurgitation include backflow rather than true mitral regurgitation." In addition, the Trust submits that "the January 13, 2002, echocardiogram includes improper gain settings." Finally, the Trust argues claimant "conveniently ignores" that the Trust's auditing cardiologists receive specialized training in the appropriate guidelines and procedures for reviewing echocardiograms.

In its sur-reply, the Estate responds that rather than apply "accepted medical standards" in connection with her audit, Dr. Penkala simply followed a checklist provided by the Trust. In addition, the Estate asserts that Dr. Penkala "failed to assign any significance or effect" resulting from the alleged "high color gain."

The Technical Advisor, Dr. Abramson, reviewed the echocardiogram and concluded that there was a reasonable medical basis for the attesting physician's finding that Ms. Botts had moderate mitral regurgitation. Specifically, Dr. Abramson stated in her report that:

... The parasternal views are of suboptimal quality, but the apical views are much improved. I measured the mitral regurgitant jet and the left atrial area in five representative cardiac cycles. My

measurements for mitral regurgitant jet area/left atrial area are $5.3~\rm cm^2/20.7~\rm cm^2$, $6.6~\rm cm^2/22.4~\rm cm^2$, $5.2~\rm cm^2/19.9~\rm cm^2$, $5.3~\rm cm^2/20.2~\rm cm^2$ and $4.4~\rm cm^2/18.1~\rm cm^2$. These RJA/LAA ratios are 26%, 29%, 26%, 26%, and 24%, all of which are greater than 20%, and are consistent with moderate mitral regurgitation.

The RJA measurements on the tape and in Exhibits B, C and D all seem adequate. tracing is all of mosaic high velocity flow occurring in systole which is consistent with mitral regurgitation. There is no evidence of excessive color gain in this tape which would appear as color speckling in areas where the flow is not increased such as mitral inflow. The holosystolic mosaic flow in the left atrium which emanates from the mitral leaflets is consistent with mitral regurgitation. Backflow is not mosaic flow because it is much lower velocity than mitral regurgitation. These jets are not consistent with backflow.

In summary, a reasonable echocardiographer would interpret the severity of this mitral regurgitation as moderate. There is a reasonable medical basis for the Attesting Physician's claim that Lanell Botts has moderate mitral regurgitation.

After reviewing the entire Show Cause Record, we find that the Estate has established a reasonable medical basis for its claim. The attesting physician, Dr. Muttreja, reviewed the echocardiogram and found that Ms. Botts had moderate mitral regurgitation. The auditing cardiologist concluded that the echocardiogram demonstrated overgaining and excessive color gain and that Dr. Muttreja relied upon measurements that included backflow. Although the Trust challenged Dr. Muttreja's findings, the Estate submitted an echocardiogram report prepared by

Dr. Berger, along with declarations of Dr. Muttreja and three experts who determined that the echocardiogram was consistent with moderate mitral regurgitation. The Estate also submitted a second declaration of Dr. Muttreja wherein he: (1) explained the difference between overgain and excessive color gain; (2) responded to Dr. Penkala's determination that the tracing on the echocardiogram included backflow that "occurs 'after the QRS, and just before or on the beginning of the T wave.'" The Trust did not adequately respond to the findings set forth in Dr. Muttreja's supplemental declaration.

In addition, Dr. Abramson reviewed the echocardiogram and confirmed Dr. Muttreja's finding of moderate mitral regurgitation. Specifically, Dr. Abramson determined that the "RJA/LAA ratios are 26%, 29%, 26%, 26%, and 24%, all of which are greater than 20%, and are consistent with moderate mitral regurgitation." Dr. Abramson also disagreed with Dr. Penkala that tracing on the echocardiogram represented backflow. In particular, Dr. Abramson opined, "The tracing is all of mosaic high velocity flow occurring in systole which is consistent with mitral regurgitation." Despite an opportunity to do so, the Trust did not submit a response to the Technical Advisor Report. See Audit Rule 34.

As stated above, moderate or greater mitral regurgitation is present where the RJA in any apical view is equal to or greater than 20% of the LAA. <u>See</u> Settlement Agreement § I.22. Here, Dr. Muttreja, claimant's experts, and

Dr. Abramson each found that the RJA/LAA ratio was greater than 20%. Under these circumstances, the Estate has met its burden to establish a reasonable medical basis for Dr. Muttreja's Green Form representation that Lanell Botts had moderate mitral regurgitation.

For the foregoing reasons, we conclude that the Estate of Lanell Botts has met its burden of proving that there is a reasonable medical basis for its claim and is consequently entitled to Matrix B-1, Level V benefits. Therefore, we will reverse the Trust's denial of the Estate's claim for Matrix Benefits.